

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): Bi-directional telescope for a laser on air

telecommunication system, the telescope comprising:

a primary optical surface (16), comprising at least one illuminated area and a reflecting optical surface;

at least one transmitting device (12; 121, 122) forming at least one transmitting beam impinging against the primary optical surface (16) at the at least one illuminated area (24; 241, 242), the at least one transmitting beam having a corresponding axis (12'; 121', 122'); and

a receiving device (14) collecting the power deflected by the reflecting optical surface (26) of the primary optical surface (16) into a receiving beam, the receiving beam having an axis (14');

wherein the reflecting optical surface (26) of the primary optical surface (16) is larger than the at least one illuminated area (24; 241, 242), and the transmitting beam axis incident to the primary optical surface (12'; 121', 122') does not coincide with the receiving beam axis (14') incident to the primary optical surface.

2. (currently amended): Telescope according to claim 1, further comprising a

secondary optical surface (18), wherein the received power deflected by the reflecting optical

surface (26) of the primary optical surface (16) is focused by the secondary optical surface into the receiving beam.

3. (currently amended): Telescope according to claim 1, wherein said primary optical surface comprises a hole (20).

4. (currently amended): Telescope according to claim 2, wherein said at least one transmitting device (12; 121, 122) is placed fundamentally in front of the reflecting optical surface (26), behind the secondary optical surface (18) and in that the secondary optical surface (18) comprises a hole (22; 221, 222) through which passes at least a portion of the transmitted beam that impinges on the primary optical surface.

5. (currently amended): Telescope according to claim 1, wherein said at least one transmitting device (12; 121, 122) is placed fundamentally behind the reflecting optical surface (26), and

wherein said telescope further comprises means (30) for deflecting the transmitting beam towards the secondary optical surface (18).

6. (currently amended): Method for receiving-transmitting an optical signal through a bi-directional telescope for a laser on air telecommunication system, the method comprising:

providing a primary optical surface (16) comprising at least one illuminated area and a reflecting optical surface;

providing at least one transmitting device (12; 121, 122) forming at least one transmitting beam impinging against the primary optical surface (16) at the at least one illuminated area (24; 241, 242), the at least one transmitting beam having a corresponding axis (12'; 121', 122');

providing a receiving device (14) collecting the power deflected by the reflecting optical surface (26) of the primary optical surface (16) into a receiving beam, the receiving beam having an axis (14');

wherein the reflecting optical surface (26) is larger than the at least one illuminated area (24; 241, 242), and the transmitting beam axis incident to the primary optical surface (12'; 121', 122') does not coincide with the receiving beam axis incident to the primary optical surface (14').

7. (currently amended): Method according to claim 6, further comprising the step of providing a secondary optical surface (18), wherein the received power deflected by the reflecting optical surface (26) of the primary optical surface (16) is focused by the secondary optical surface into the receiving beam.

8. (currently amended): Method according to claim 6, further comprising the step of making a hole (20) in said primary optical surface.

9. (currently amended): Method according to claim 7, further comprising placing said at least one transmitting device ~~(12; 121, 122)~~ fundamentally in front of the reflecting optical surface ~~(26)~~, behind the secondary optical surface ~~(18)~~ and making at least one hole ~~(22; 221, 222)~~ in the secondary optical surface ~~(18)~~ through which passes at least a portion of the transmitted beam that impinges on the primary optical surface.

10. (currently amended): Method according to claim 7, further comprising placing said at least one transmitting device ~~(12; 121, 122)~~ fundamentally behind the reflecting optical surface ~~(26)~~ and by providing means ~~(30)~~ for deflecting the transmitting beam towards the secondary optical surface ~~(18)~~.

11. (previously presented): The telescope according to claim 1, wherein the at least one illuminated area overlaps the reflecting optical surface.

12. (previously presented): The method according to claim 6, wherein the at least one illuminated area overlaps the reflecting optical surface.

13. (new): The telescope according to claim 1, wherein the axis of the transmitting beam is located at the center of the transmission beam impinging on said optical face, and wherein the axis of the receiving beam is located at the center of the receiving beam deflected from the reflecting optical surface.

14. (new): The method according to claim 6, wherein the axis of the transmitting beam is located at the center of the transmission beam, and wherein the axis of the receiving beam is located at the center of the receiving beam.